

Title (en)
Suction powered pool cleaner

Title (de)
Saugangtriebener Beckenreiniger

Title (fr)
nettoyeur de bassin actionné par suction

Publication
EP 2292876 A3 20150107 (EN)

Application
EP 10184274 A 19990517

Priority
• EP 99924342 A 19990517
• US 9089498 A 19980604

Abstract (en)
[origin: WO9963185A1] A pool cleaner (10) is provided powered by a suction source by connecting the pool cleaner (10) via a vacuum hose (14) to the suction side of a pool water filtration system (12). The pool cleaner (10) comprises a housing (28) carried on wheels (16) for rolling movement along a submerged pool surface (44). A debris intake nozzle (50) is formed at a lower end (42) of the housing (28) in close proximity with the pool surface (44), and communicates through a turbine chamber (52) in the housing (28) to the vacuum hose (14) for water-borne vacuuming of debris from the pool surface (44). Water drawn through the turbine chamber (52) rotatably drives a turbine (68) which is turn powers a drive train to rotatably drive the cleaner wheels (16) together with a downward force fan (84) for improved wheel traction. In addition, the drive train operates a timer cam (146) for periodically actuating a reverse clutch assembly (98) to drive at least one of the cleaner wheels (16) in reverse.

IPC 8 full level
E04H 4/16 (2006.01)

CPC (source: EP US)
E04H 4/1654 (2013.01 - EP US)

Citation (search report)
• [XYI] EP 0622506 A1 19941102 - RAUBENHEIMER DENNIS ANDREW [ZA]
• [X] FR 2583997 A1 19870102 - TRULOCK PROD LTD [NZ]
• [X] GB 2153208 A 19850821 - ALOPEX IND INC
• [X] US 3439368 A 19690422 - MYERS ROBERT R
• [YD] US 5105496 A 19920421 - GRAY JR JOSEPH S [US], et al
• [Y] FR 2079942 A6 19711112 - CAUWENBERGHE CHRISTIAN, et al
• [A] US 4168557 A 19790925 - RASCH WILHELM, et al

Cited by
US9677294B2

Designated contracting state (EPC)
DE ES FR GB IT PT

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WO 9963185 A1 19991209; AU 4086599 A 19991220; AU 756881 B2 20030123; CA 2299581 A1 19991209; CA 2299581 C 20070731; EP 1002173 A1 20000524; EP 1002173 A4 20041222; EP 1002173 B1 20120328; EP 2275626 A2 20110119; EP 2275626 A3 20150107; EP 2292876 A2 20110309; EP 2292876 A3 20150107; ES 2384076 T3 20120629; US 6094764 A 20000801; ZA 200000498 B 20001025

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